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Docket No. SUN-DA-136T Serial No. 10/750,252

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for fabricating a nonvolatile memory device comprising:

forming an isolation layer and a non-active region in a semiconductor substrate;
forming an oxide layer and a polysilicon layer on the substrate;
forming a sacrificial layer on the polysilicon layer;
patterning the sacrificial layer to form polymer layers on sidewalls of the sacrificial layer,
wherein patterning the sacrificial layer to form polymer layers on sidewalls of the
sacrificial layer comprises:

forming a photoresist pattern on the sacrificial layer, and
etching a portion of the sacrificial layer through the photoresist pattern, the
polymer layers being generated from the etching of the sacrificial layer; and
forming a floating gate and a tunnel oxide using the sacrificial layer and the polymer
layers as an etching mask.

- 2. (Original) A method as defined in claim 1, further comprising: removing the polymer layers and the sacrificial layer; and forming an insulating layer and a polysilicon layer over the substrate, the floating gate, and the tunnel oxide.
- 3. (Original) A method as defined in claim 1, wherein the sacrificial layer is formed of one selected from the group consisting of TEOS (tetraethyl orthosilicate) oxides and nitride.
- 4. (Previously Presented) A method as defined in claim 1, wherein a space between two adjacent polymer layers is between 300Å and 1200Å.
 - 5. (Cancelled)
 - 6. (Cancelled)

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- 7. (Previously Presented) A method as defined in claim 1, wherein the polymer layers on the sidewalls of the sacrificial layer are separated by less than a lithographic minimum feature size.
 - 8. (Previously Presented) A method for fabricating a nonvolatile memory device comprising: forming an isolation layer and a non-active region in a semiconductor substrate;

forming an oxide layer and a polysilicon layer on the substrate;

forming a first sacrificial layer on the polysilicon layer;

forming a second sacrificial layer on the first sacrificial layer;

etching the first sacrificial layer using the second sacrificial layer as a mask to form polymer layers on sidewalls of the first and the second sacrificial layers, the polymer layers being generated from the etching of the first sacrificial layer; and

forming a floating gate and a tunnel oxide using the first and the second sacrificial layers and the polymer layers as an etching mask.

- 9. (Previously Presented) A method as defined in claim 0, further comprising: removing the polymer layers, the first sacrificial layer and the second sacrificial layer; and forming an insulating layer and a polysilicon layer over the substrate, the floating gate, and the tunnel oxide.
- 10. (Previously Presented) A method as defined in claim 0, wherein the polymer layers on the sidewalls of the first and the second sacrificial layers are separated by less than a lithographic minimum feature size.
- 11. (Previously Presented) A method as defined in claim 0, wherein the second sacrificial layer comprises a patterned photoresistive material.